UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THEO T. M. BOGAERT
and
SIEGER T. MEIJER

Appeal No. 2005-1945
Application No. 09/777,510

ON BRIEF

Before McQUADE, NASE, and BAHR, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection (mailed July 2, 2003) of claims 1 to 19, 25 to 34 and 48 to 50. Claims 21 to 23, 35 to 47 and 51 to 54 have been allowed. Claims 20 and 24 have been canceled.

We REVERSE.

BACKGROUND

The appellants' invention relates to implantable phakic intraocular lenses (IOLs) suitable as correction lenses together with the intact natural crystalline lens. The appellants' lenses are provided with a posterior surface, which admits a more anatomical fit in the posterior chamber of the eye, thereby minimizing the risks of disturbing the natural lens (specification, p. 1). A copy of claims 2 to 19, 25 to 34 and 48 to 50 is set forth in the appendix to the appellants' brief. Claim 1 reads as follows:

> An intraocular correction lens adapted for implantation in the posterior chamber of an eye between the iris and the intact natural lens, comprising
>
> a centrally located optical part capable of providing an optical correction and
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> a peripherally located supporting element capable of maintaining said optical part in said central location,
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> wherein said optical part and said support element together have a concave posterior surface which is part of a non-spherical surface that is rotation symmetric around the optical axis of said optical part, wherein the intersection between said non-spherical surface and any plane containing the optical axis represents a flawless curve free from discontinuities and points of inflection.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Choyce	4,414,694	Nov. 15, 1983
Wanders	6,092,899	July 25, 2000
Feingold	6,106,553	Aug. 22, 2000

Claims 1 to 19, 25, 29 to 34 and 48 to 50 stand rejected under 35 U.S.C. § 103 as being unpatentable over Feingold in view of Wanders.

Claims 26 to 28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Feingold in view of Wanders and Choyce.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection, the answer (mailed March 19, 2004) and the supplemental answer (mailed September 17, 2004) for the examiner's complete reasoning in support of the rejections, and to the brief (filed January 9, 2004), reply brief (filed May 24, 2004) and supplemental reply brief (filed November 22, 2004) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to

the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 19, 25 to 34 and 48 to 50 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

With this as background, we analyze the prior art applied by the examiner in the rejection of claim 1 on appeal.

Feingold

Feingold's invention relates to an intraocular lens, in particular an intraocular refractive correction lens, and a method of implanting an intraocular lens to correct the eyesight of an eye. A first embodiment of a positive intraocular refractive correction lens is shown in Figures 1-3. The intraocular refractive correction lens 10 is defined by

an oval-shaped lens body portion 12 and a circular shaped lens portion 14. The lens portion 14 has a curvature SRfr, and the lens body portion 12 has an outer curvature SRo and an inner curvature SRi.

A second embodiment of a positive intraocular refractive correction lens is shown in Figures 4-6. The intraocular refractive correction lens 20 is defined by an oval-shaped lens body portion 22 and a circular shaped lens portion 24. The lens portion 24 has a curvature SRfr and the lens body portion 22 has an outer curvature SRfr2 (SRo) and an inner curvature SRi.

An embodiment of a negative intraocular refractive correction lens is shown in Figures 8-10. The intraocular refractive correction lens 30 is defined by an oval-shaped lens body portion 32 and a circular shaped lens portion 34. The lens portion 34 has a curvature SRfr and the lens body portion 32 has an outer curvature SRfr2 (SRo) and an inner curvature SRi.

A second embodiment of a negative intraocular refractive correction lens is shown in Figures 11-13. The intraocular refractive correction lens 40 is defined by an oval-shaped lens body portion 42 and a circular shaped lens portion 44. The lens

portion 44 has a curvature SRfr and the lens body portion 42 has an outer curvature SRfr2 (SRo) and an inner curvature SRi.

A third embodiment of a positive intraocular refractive correction lens is shown in Figures 15-17. The intraocular refractive correction lens 50 is defined by an oval-shaped lens body portion 52 and a circular shaped lens portion 54. The detailed curvature of the intraocular refractive correction lens is shown in Figure 17. An example of this particular lens is given in the table in Figure 18 with the designations R1-R8 corresponding to Figure 17.

A third embodiment of a negative intraocular refractive correction lens is shown in Figures 20-21. The intraocular refractive correction lens 70 is defined by an oval-shaped lens body portion 72 and a circular shaped lens portion 74. The important feature of this embodiment is the circular groove G provided in the lens body portion 72 surrounding the lens portion 74. The circular groove G allows for circulation of fluid inside the eye. Further, the groove G can be used for lens manipulation during surgery, and facilitates the equalization of intraocular pressure.

An embodiment of an intraocular refractive correction lens 80 having a lens body portion 82 and lens portion 84, is shown in Figures 22-24. In this embodiment, an air

passageway 86 (e.g., hole) is provided in the center optical axis of the lens portion 84 for equalizing the pressure between the anterior surface 88 and posterior surface 90 of the intraocular refractive correction lens 80. This air passageway 86 allows for equalization of pressure between the anterior chamber and posterior chamber of the eye. Otherwise, a significant suction or negative pressure can occur on the anterior surface of the intraocular refractive correction lens sucking the back of the iris into contact therewith and causing damage or wear to the iris. The intraocular refractive correction lens 80 is provided with a pair of indents 92 for allowing the intraocular refractive correction lens 80 to be manipulated under the iris during the implantation operation. The indents 92 are significantly better than through holes for purposes of manipulation, since the bottoms of the indents prevent penetration of a manipulating tool through the lens and inadvertently into contact with the natural lens that would cause an immediate cataract of the natural lens.

Wanders

Wanders' invention relates to a multifocal contact lens, having a reading part in the bottom part and another lens in the top part. It can be seen from Figure 4 that the transition between the distance part with radius R_v and the reading part with radius R_1 is particularly gradual. This means that the eye will suffer little or no irritation, and wearing comfort will be increased and image discontinuity and reflection will be avoided. This

design means that the lens can be made very thin, with the result that oxygen permeability and the wearing comfort associated therewith are optimal.

Claim 1

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Feingold and claim 1, it is our opinion that the only difference is the limitation that "said optical part and said support element together have a concave posterior surface which is part of a non-spherical surface that is rotation symmetric around the optical axis of said optical part, wherein the intersection between said non-spherical surface and any plane containing the optical axis represents a flawless curve free from discontinuities and points of inflection." In that regard, the concave posterior surfaces of Feingold's lenses either are spherical or include discontinuities and points of inflection (e.g., Fig. 17) as shown in the drawings.

With regard to this difference, we reach the conclusion that the combined teachings of Feingold and Wanders fail to establish a prima facie case of obviousness. Specifically, we find that the combined teachings of Feingold and Wanders would not

have made it obvious at the time the invention was made to a person having ordinary skill in the art to have modified the concave posterior surface of any of Feingold's lenses to be a concave posterior surface which is part of a non-spherical surface that is rotation symmetric around the optical axis of said optical part, wherein the intersection between said non-spherical surface and any plane containing the optical axis represents a flawless curve free from discontinuities and points of inflection.

In our view, the only suggestion for modifying Feingold in the manner proposed by the examiner to meet the above-noted limitation stems from hindsight knowledge derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

For the reasons set forth above, the decision of the examiner to reject claim 1 under 35 U.S.C. § 103 is reversed.

Claims 2 to 19, 25, 29 to 34 and 48 to 50

For the reasons set forth above with respect to claim 1, the decision of the examiner to reject claims 2 to 19, 25, 29 to 34 and 48 to 50 (dependent in one way or another on claim 1) under 35 U.S.C. § 103 is reversed.

Claims 26 to 28

We have also reviewed the reference to Choyce additionally applied in the rejection of claims 26 to 28 but find nothing therein which makes up for the deficiencies of Feingold and Wanders discussed above. Accordingly, the decision of the examiner to reject claims 26 to 28 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 19, 25 to 34 and 48 to 50 under 35 U.S.C. § 103 is reversed.

REVERSED

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

) BOARD OF PATENT APPEALS AND INTERFERENCES

DINSMORE & SHOHL, LLP
1900 CHEMED CENTER
255 EAST FIFTH STREET
CINCINNATI, OH 45202

JVN/jg